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It should be understood that other quality of service issues may be factored into the above-identified scheme to allow the server to modify the value [M]  $\underline{N}$ . In addition, other criteria similar to those set forth above[,] are contemplated and could be employed as part of the present invention.

## **AMENDMENTS TO THE CLAIMS:**

The following listing of claims will replace all prior versions, and listings, of claims in the captioned Application:

## **Listing Of Claims:**

Claim 1 (currently amended): A method for authenticating transferred data between a sender computer and a receiver computer over an open network comprising the steps of:

establishing a first secure transmission of data between the sender <a href="mailto:computer">computer</a> and the receiver <a href="mailto:computer">computer</a>;

transmitting at least one token <u>from the sender computer</u> to the receiver <u>computer</u> during the first secure transmission, the number of tokens being set to a variable N;

establishing at least one additional transmission of data between the

sender computer and the receiver computer;

transmitting the data and the at least one token from the sender computer to
the receiver computer during the at least one additional transmission; [and]

during the at least one token transmitted <u>from the sender computer</u>

during the at least one additional transmission to the at least one token

transmitted <u>from the sender computer</u> during the first secure transmission to

determine whether the transmission is authentic; <u>and</u>

each time a first secure transmission is performed, the sender computer transmits to the receiver computer a selected value of N and N number of tokens to be used to authenticate the sender computer.

Claim 2 (currently amended): The method [according to] <u>set forth in claim 1,</u> wherein the at least one token comprises a preselected number of tokens.

Claim 3 (currently amended): The method [according to] set forth in claim 2, wherein the number of at least one transmissions corresponds to the preselected number of tokens.

Claim 4 (currently amended): The method [according to] set forth in claim 2, wherein the number of at least one transmissions is greater [then] than the preselected number of tokens.

Claim 5 (currently amended): The method [according to] set forth in claim 2, wherein the number of at least one transmissions is less than the preselected number of tokens.

Claim 6 (currently amended): The method [according to] set forth in claim 1, wherein the at least one additional transmission is conducted over an unsecure or open connection.

Claim 7 (currently amended): The method [according to] set forth in claim 1, wherein the first secure transmission is encrypted.

Claim 8 (currently amended): The method [according to] set forth in claim 1, wherein the at least one additional transmission is sent in plaintext.

Claim 9 (currently amended): The method [according to] set forth in claim 5, wherein the at least one additional transmission is sent in plaintext.

Claim 10 (currently amended): The method [according to] set forth in claim 2, wherein the first secure transmission is encrypted.

Claim 11 (currently amended): The method [according to] set forth in claim 3, wherein the at least one additional transmission is sent in plaintext.

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Claim 12 (currently amended): The method [according to] set forth in claim 1, further comprising the steps of transmitting a checksum value during the first transmission and having the receiver verify that the checksum value is accurate by comparing the transmitted value to a checksum value generated using a similar checksum algorithm.

Claim 13 (currently amended): The method [according to] set forth in claim 10, wherein the transmitted checksum value is based upon checksum values transmitted during previous transmissions.

Claim 14 (currently amended): A method for securely transferring data between a [sender] <u>client computer</u> and a [receiver] <u>server</u> over an open network comprising the steps of:

establishing a first secure transmission between the client computer

and the server which is encrypted;

\_\_\_\_\_\_\_transmitting a preselected number of tokens from the client computer to

the server during the first secure transmission, the number of tokens being set to a

variable N;

\_\_\_\_\_\_establishing [a number of] additional transmissions between the client

computer and the server corresponding to the preselected number of tokens N;

\_\_\_\_\_\_transmitting the data and one of the preselected tokens from the client

computer during each additional transmission;

\_\_\_\_\_\_comparing the [transmitted] token transmitted during the additional transmis-



sion to the corresponding token transmitted during the first secure transmission; and

each time a first secure transmission is performed, the client computer

transmits to the server a selected value of N and N number of tokens to be used

to authenticate the client computer.

Claim 15 (currently amended): The method [according to] set forth in claim 14, wherein the additional transmissions are sent in plaintext.

Claim 16 (currently amended): The method [according to] set forth in claim 14, further comprising the steps of transmitting a checksum value during the first transmission and having the receiver computer verify that the checksum value is accurate by comparing the transmitted checksum value to a checksum value generated using a similar algorithm.

Claim 17 (currently amended): The method [according to] <u>set forth in</u> claim 16, wherein the transmitted checksum value is based upon checksum values transmitted during previous transmissions during this transaction.

Claim 18 (cancelled).

Claim 19 (currently amended): The method [according to] <u>set forth in claim</u> 1[8], wherein the [number of] additional transmissions [is] <u>are variable and adaptively</u> selected, at least in part, based upon the performance overhead of the system.

Claim 20 (currently amended): The method [according to] set forth in claim 1[8], wherein the [number of] additional transmissions [is] are variable and adaptively selected, at least in part, based upon monitored conditions.

Claim 21 (cancelled).

Claim 22 (currently amended): The method [according to] set forth in claim 2[2]3, wherein the algorithm is a statistical averaging algorithm.

On page 35, after paragraph 3, please add the following new claim:

- - 23. A method for authenticating transferred data between a sender computer and a receiver computer over an open network comprising the steps of:

establishing a first secure transmission of data between the sender computer and the receiver computer;

transmitting at least one token from the sender computer to the receiver computer during the first secure transmission, the number of tokens being set to a variable N;

establishing at least one additional transmission of data between the sender computer and the receiver computer;

transmitting the data and the at least one token from the sender computer to the receiver computer during the at least one additional transmission;

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